HTML, XHTML, and XML

3rd Edition

Tutorial 5

Working with Web Tables

Thanks to the author of the textbook for providing these slides. I made slight changes/additions.
Turgay Korkmaz

Objectives

- Explore the structure of a Web table
- Create headings and cells in a table
- Create cells that span multiple rows and columns
- Create row and column groups
- Add a caption and a summary to a table
- Format a table using HTML attributes

Objectives

- Format a table using CSS styles
- Collapse table borders
- Display page elements in tabular form
- Create a jigsaw layout
- Explore the use of tables for page layout
- Create rounded borders

Tutorial_05/tutorial

Textbook Pg 272

Initial schedule

KPAF nightly schedule

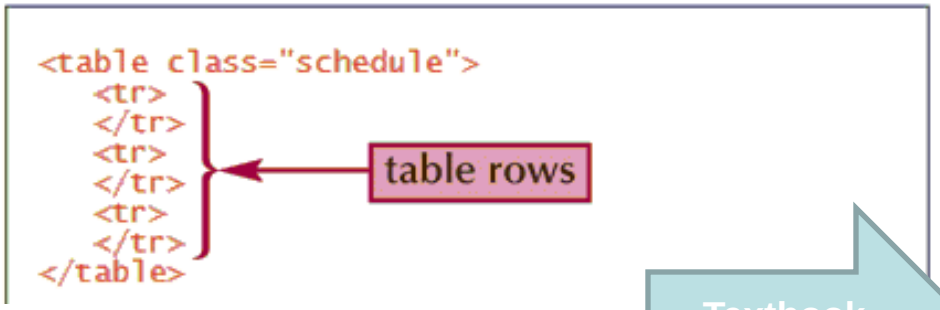
Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6:00	National News	National News	National News	National News	National News	National News	National News
6:30	Local News	Local News	Local News	Local News	Local News	Local News	Local News
7:00	Opera Fest	Radio U	Science Week	The Living World	Word Play	Agri-Week	Folk Fest
7:30					Brain Stew	Bismarck Forum	
8:00	The Classical Music Connection				Old Time Radio	Saturday Nite Jazz	The Indie Connection
8:30					The Inner Mind		
9:00					Open Mike Nite		
9:30							
10:00	World News Feed	World News Feed	World News Feed	World News Feed	World News Feed	World News Feed	World News Feed

Introducing Web Tables

- Each table in a Web page follows a basic structure consisting of the table element and a collection of table rows nested in the table element

```
<table>
    <tr>
        table cells
    </tr>
    <tr>
        table cells
    </tr>
    ...
</table>
```

- Table dimension: row × col
- No element to mark column
- Block-level (appear in a new line, float, resize etc)



Textbook Pg 274

Introducing Web Tables

table cells

Textbook Pg 274-276

- **Table headings**, the cells that identify the contents of a row or column, are marked using a `<th>` tag
- **Data cells** are marked with the `<td>` tag and are used for any content that is not considered a heading

```
<table class="schedule">
   <tr>
      <th>Time</th>
      <th>Monday</th>
      <th>Tuesday</th>
      <th>Wednesday</th>
      <th>Thursday</th>
      <th>Friday</th>
      <th>Saturday</th>
      <th>Sunday</th>
   </tr>
   <tr>
      <th>6:00</th>
      <td>National News</td>
      <td>National News</td>
      <td>National News</td>
      <td>National News</td>
      <td>National News</td>
      <td>National News</td>
      <td>National News</td>
   </tr>
   <tr>
      <th>6:30</th>
      <td>Local News</td>
      <td>Local News</td>
      <td>Local News</td>
      <td>Local News</td>
      <td>Local News</td>
      <td>Local News</td>
      <td>Local News</td>
   </tr>
</table>
```

table data cells

KPAF Nightly Schedule

KPAF airs listener-supported public radio in Bismarck, North Dakota from 5:00 a.m. to 10:30 p.m. can Listen Live to streaming audio of our broadcast. Please refer below for our current nightly schedule.

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6:00	National News	National News	National News	National News	National News	National News	National News
6:30	Local News	Local News	Local News	Local News	Local News	Local News	Local News

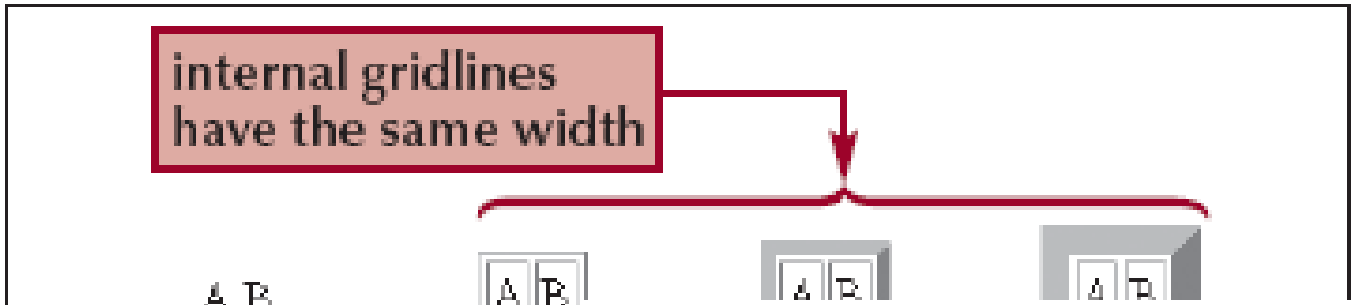
Introducing Web Tables

Textbook Pg 278

- To add a border to a Web table using HTML, use the border attribute

  `<table border="value"> ... </table>`

  where *value* is the size of the border in pixels




```
<table class="schedule" border="1">
   <tr>
      <th>Time</th>
      <th>Monday</th>
      <th>Tuesday</th>
      <th>Wednesday</th>
      <th>Thursday</th>
      <th>Friday</th>
      <th>Saturday</th>
      <th>Sunday</th>
   </tr>
```

table cells will be surrounded by a 1-pixel-wide border

KPAF Nightly Schedule

KPAF airs listener-supported public radio in Bismarck, North Dakota from 5:00 a.m. to 10:30 p.m. You can Listen Live to streaming audio of our broadcast. Please refer below for our current nightly schedule.

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6:00	National News	National News	National News	National News	National News	National News	National News
6:30	Local News	Local News	Local News	Local News	Local News	Local News	Local News

Spanning Rows and Columns

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6:00	National News	National News	National News	National News	National News	National News	National News
6:30	Local News	Local News	Local News	Local News	Local News	Local News	Local News

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6:00	National News						
6:30	Local News						

cells span seven columns

Spanning Rows and Columns

- A **spanning cell** is a single cell that occupies more than one row or one column in the table
- To create a table cell `<th ...>` or `<td ...>` that spans several columns, add the attribute

  `colspan="value"`

  to the cell, where *value* is the number of columns covered by the cell
- To create a table cell `<th ...>` or `<td ...>` that spans several rows, add the attribute

  `rowspan="value"`

  to the cell, where *value* is the number of rows covered by the cell

Spanning Rows and Columns

Textbook Pg 280

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6:00	National News	National News	National News	National News	National News	National News	National News
6:30	Local News	Local News	Local News	Local News	Local News	Local News	Local News

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6:00	National News						
6:30	Local News						

cells span seven columns

```
<table class="schedule" border="1">
   <tr>
      <th>Time</th>
      <th>Monday</th>
      <th>Tuesday</th>
      <th>Wednesday</th>
      <th>Thursday</th>
      <th>Friday</th>
      <th>Saturday</th>
      <th>Sunday</th>
   </tr>
   <tr>
      <th>6:00</th>
      <td colspan="7">National News</td>
   </tr>
   <tr>
      <th>6:30</th>
      <td colspan="7">Local News</td>
   </tr>
</table>
```

cell spans seven columns

delete the other six cells in the table row

Spanning Rows and Columns

Textbook
Pg 281-282

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6:00	National News						
6:30	Local News						
7:00	Opera Fest	Radio U	Science Week	The Living World	Word Play	Agri-Week	Folk Fest
7:30					Brain Stew	Bismarck Forum	

```
    <tr>
        <th>6:30</th>
        <td colspan="7">Local News</td>
    </tr>
    <tr>
        <th>7:00</th>
        <td rowspan="2">Opera Fest</td>
        <td rowspan="2">Radio U</td>
        <td rowspan="2">Science Week</td>
        <td rowspan="2">The Living World</td>
        <td>Word Play</td>
        <td>Agri-Week</td>
        <td rowspan="2">Folk Fest</td>
    </tr>
    <tr>
        <th>7:30</th>
        <td>Brain Stew</td>
        <td>Bismarck Forum</td>
    </tr>
</table>
```

Spanning Rows and Columns

Textbook
Pg 283-284

All times listed in central time

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6:00	National News						
6:30	Local News						
7:00	Opera Fest	Radio U	Science Week	The Living World	Word Play	Agri-Week	Folk Fest
7:30					Brain Stew	Bismarck Forum	
8:00	The Classical Music Connection				Old Time Radio	Saturday Nite Jazz	The Indie Connection
8:30					The Inner Mind		
9:00					Open Mike Nite		
9:30							
10:00	World News Feed						

Spanning Rows and Columns

Textbook
Pg 283-284

```
    <tr>
        <th>7:30</th>
        <td>Brain Stew</td>
        <td>Bismarck Forum</td>
    </tr>
    <tr>
        <th>8:00</th>
        <td rowspan="4" colspan="4">The Classical Music Connection</td>
        <td>Old Time Radio</td>
        <td rowspan="4">Saturday Nite Jazz</td>
        <td rowspan="4">The Indie Connection</td>
    </tr>
    <tr>
        <th>8:30</th>
        <td>The Inner Mind</td>
    </tr>
    <tr>
        <th>9:00</th>
        <td rowspan="2">Open Mike Nite</td>
    </tr>
    <tr>
        <th>9:30</th>
    </tr>
    <tr>
        <th>10:00</th>
        <td colspan="7">World News Feed</td>
    </tr>
</table>
```

Creating a Table Caption

- To create a table caption, add the caption element directly below the opening <table> tag with the syntax

```
<table>
  <caption>content</caption>
…
</table>
```

where *content* is the content of the table caption

```
<caption align="pos">content</caption>
```

pos: top, bottom, left, right (CSS can be used too)

Creating a Table Caption

Textbook Pg 285

All times listed in central time

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6:00	National News						
6:30	Local News						
7:00	Opera Fest	Radio U	Science Week	The Living World	Word Play	Agri-Week	Folk Fest
7:30					Brain Stew	Bismarck Forum	
8:00	The Classical Music Connection				Old Time Radio	Saturday Nite Jazz	The Indie Connection
8:30					The Inner Mind		
9:00					Open Mike Nite		
9:30							
10:00	World News Feed						

```
<table class="schedule" border="1">
   <caption>All times listed in central time</caption>
   <tr>
      <th>Time</th>
      <th>Monday</th>
```

Marking Row Groups

- You can divide a table's rows into **row groups**, in which each group element contains different types of content and can be formatted differently
- A table can have multiple `tbody` row groups, but only one `thead` and one `tfoot` row groups

```
<table>
    <thead>
        table rows
    </thead>
    <tfoot>
        table rows
    </tfoot>
    <tbody>
        table rows
    </tbody>
</table>
```

```
thead {
  background-color: red}
tbody {
  background-color: green}
```

Marking Column Groups

- Once the table columns have been determined by the browser, you can reference them through the use of **column groups**
- So you can assign a common format/style to all the cells within a given column

```
<colgroup>
    <col class="column1" />
    <col class="column2" />
    <col class="column3" />
    <col class="a" span="2" />
</colgroup>
```

```
col.column1 {
  background-color:
  red}
col.column2 {
  background-color:
  green}
col.column3 {
  background-color:
  blue}
```

Marking Row and Column Groups

Textbook Pg 288, 290

```
<table class="schedule" border="1">
   <caption>All times listed in central time</caption>

   <thead>
   <tr>
      <th>Time<
      <th>Monda
      <th>Tuesd
      <th>Wedne
      <th>Thurs
      <th>Frida
      <th>Satur
      <th>Sunda
   </tr>
   </thead>

   <tbody>
   <tr>
      <th>6:00<
      <td colspan="7">National News</td>
   </tr>
```

```
<table class="schedule" border="1">
   <caption>All times listed in central time</caption>

   <colgroup>
      <col class="firstCol" />
      <col class="dayCols" span="7" />
   </colgroup>
```

col element spans seven columns

```
   <tr>
      <th>9:30</th>
   </tr>
   <tr>
      <th>10:00</th>
      <td colspan="7">World News Feed</td>
   </tr>
   </tbody>

</table>
```

We will do styling later

```
col.firstCol {…}
thead {…}
table.schedule tbody
{…}
```

Adding a Table Summary

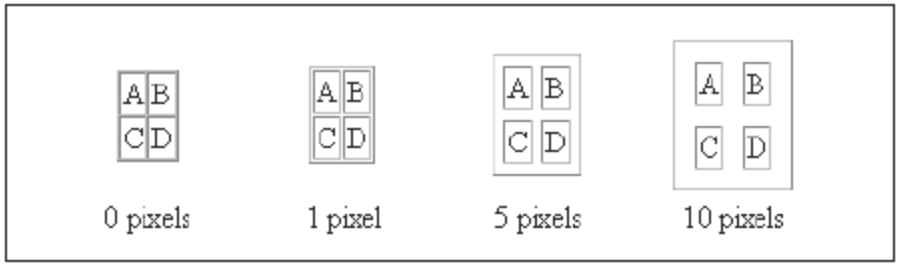
Textbook Pg 291

- The summary attribute allows you to include a more detailed description about the table
  `<table summary="description"> ... </table>`
- Like `alt` textual alternative for the table

```
<table class="schedule" border="1"
       summary="This table contains the nightly KPAF program schedule aired
                from Bismarck, North Dakota. Program times are laid out in
                thirty-minute increments from 6:00 p.m. to 10:00 p.m., Monday
                through Sunday night.">

   <caption>All times listed in central time</caption>
```

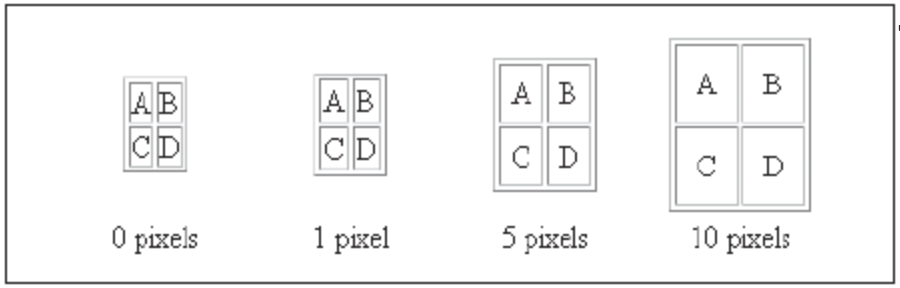
Session 5.2: Formatting Tables with HTML Attributes

- The amount of space between table cells is known as the **cell spacing**




```
<table cellspacing="value"> ... </table>
```

- The **cell padding** is the space between the cell contents and the cell border




```
<table cellpadding="value"> ... </table>
```

```
border="1"
```

Formatting Tables with HTML Attributes

Textbook Pg 294

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6:00	National News						
6:30	Local News						
7:00	Opera Fest	Radio U	Science Week	The Living World	Word Play	Agri-Week	Folk Fest
7:30					Brain Stew	Bismarck Forum	
8:00	The Classical Music Connection				Old Time Radio	Saturday Nite Jazz	The Indie Connection
8:30					The Inner Mind		
9:00					Open Mike Nite		
9:30							
10:00	World News Feed						

```
<table class="schedule" border="1" cellspacing="3" cellpadding="5"
      summary="This table contains the nightly KPAF program schedule aired
               from Bismarck, North Dakota. Program times are laid out in
               thirty-minute increments from 6:00 p.m. to 10:00 p.m., Monday
               through Sunday night.">
```

Formatting Tables with HTML Attributes

- To set the width of the table to a specific value, add the width attribute

  `<table width="value"> ... </table>`

  `<colgroup width="100" span="7">`

  `</colgroup>` width of each of seven is set to 100px
- Many browsers also support the height attribute (but it is not part of HTML spec or supported by XHTML)

  `<table height="value"> ... </table>`
- You can use HTML to set the row heights by applying the height attribute (depreciated)

  `<tr height="value"> ... </tr>`

Formatting Tables with HTML Attributes

- A **table frame** specifies which sides of the table (or which sides of the table cells) will have borders

```
<table border="value" frame="type"> …</table>
```

Frame examples

A	B	C
D	E	F
G	H	I

frame="above"

A	B	C
D	E	F
G	H	I

frame="below"

A	B	C
D	E	F
G	H	I

frame="border"

A	B	C
D	E	F
G	H	I

frame="box"

A	B	C
D	E	F
G	H	I

frame="hsides"

A	B	C
D	E	F
G	H	I

frame="lhs"

A	B	C
D	E	F
G	H	I

frame="rhs"

A	B	C
D	E	F
G	H	I

frame="vsides"

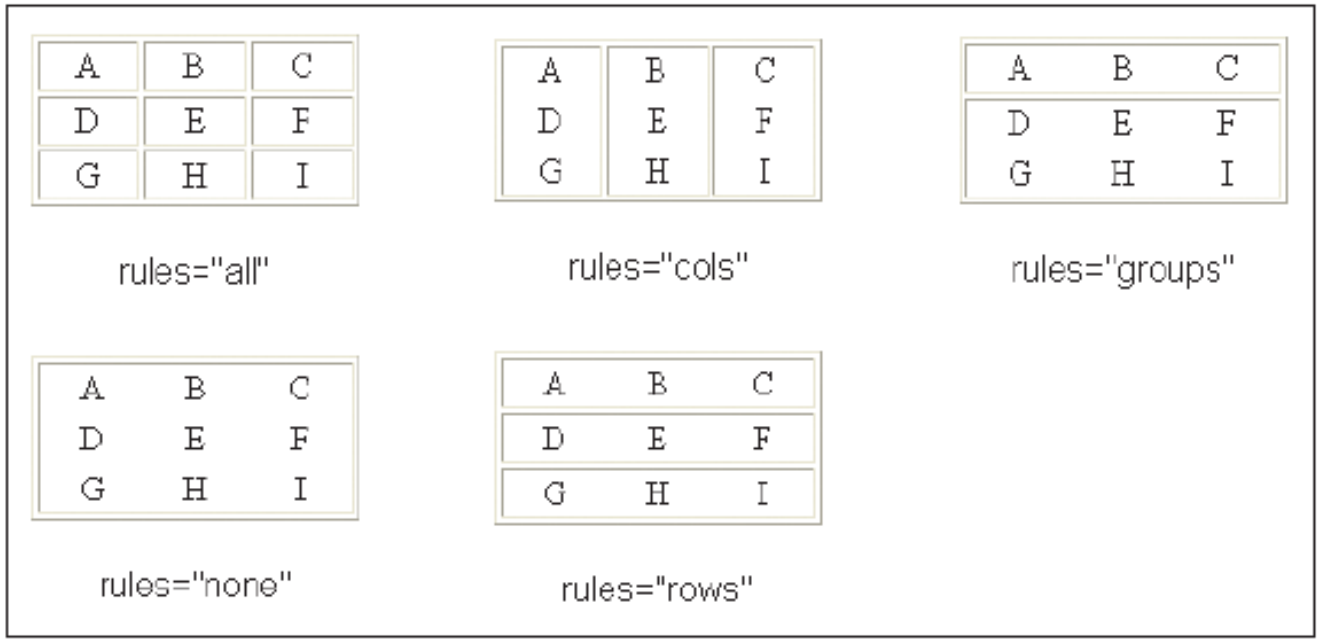
A	B	C
D	E	F
G	H	I

frame="void"

Formatting Tables with HTML Attributes

- A **table rule** specifies how the internal gridlines are drawn within the table

```
<table border="value" rules="type"> … </table>
```



Formatting Tables with HTML Attributes

- By default, browsers
  - horizontally center the contents of table header cells
  - and left-align the contents of table data cells

- To control the horizontal alignment
  `align="`*`position`*`"`
  - *`left, center, right, justify, char`*
- To control the vertical alignment
  `valign="`*`position`*`"`
  - *`top, middle, bottom, baseline`*

Formatting Tables with HTML Attributes

Textbook Pg 299

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6:00	National News						
6:30	Local News						
7:00	Opera Fest	Radio U	Science Week	The Living World	Word Play	Agri-Week	Folk Fest
7:30					Brain Stew	Bismarck Forum	
8:00	The Classical Music Connection				Old Time Radio	Saturday Nite Jazz	The Indie Connection
8:30					The Inner Mind		
9:00					Open Mike Nite		
9:30							
10:00	World News Feed						

```
<tbody valign="top">
    <tr>
        <th>6:00</th>
        <td colspan="7">National News</td>
    </tr>
```

FORMATTING TABLES WITH CSS

Formatting Tables with **CSS**

- Starting with CSS2, Cascading Style Sheets included support for Web tables
- CSS will gradually replace the HTML attributes…
- Don’t combine CSS and HTML attributes.
- Choose one…

- Let’s start with table borders
- First link table.css to your web page

Textbook Pg 300

Table Border Styles with CSS

Textbook Pg 301

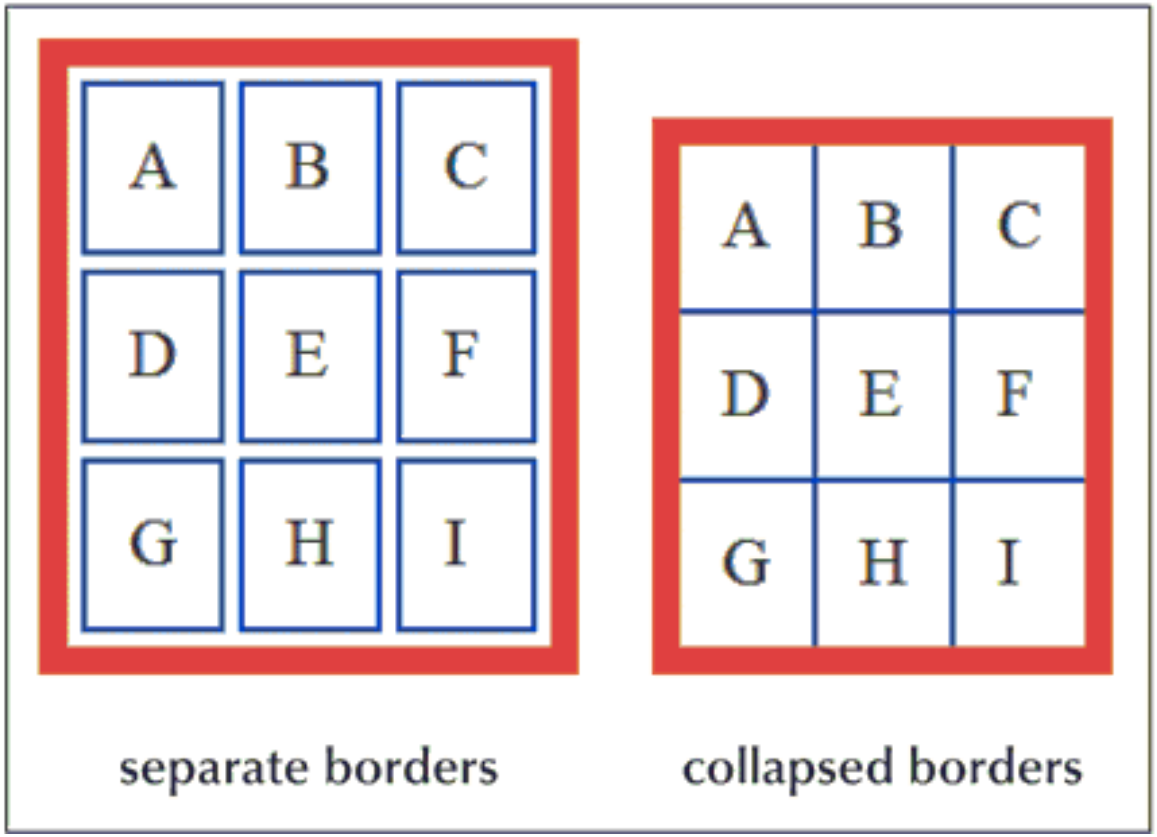
- You can apply one set of borders to the Web table itself and another set of borders to the individual cells within the table

```
table.schedule          {border: 10px outset rgb(153,0,153)}

table.schedule th, table.schedule td
                        {border: 1px solid gray}
```

All times listed in central time

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6:00	National News						
6:30	Local News						
7:00	Opera Fest	Radio U	Science Week	The Living World	Word Play	Agri-Week	Folk Fest
7:30					Brain Stew	Bismarck Forum	
8:00	The Classical Music Connection				Old Time Radio	Saturday Nite Jazz	The Indie Connection
8:30					The Inner Mind		
9:00					Open Mike Nite		
9:30							
10:00	World News Feed						

Table Border Styles with CSS



Formatting Tables with CSS

- To define the border model used by the table, apply the table style

  `border-collapse: type`

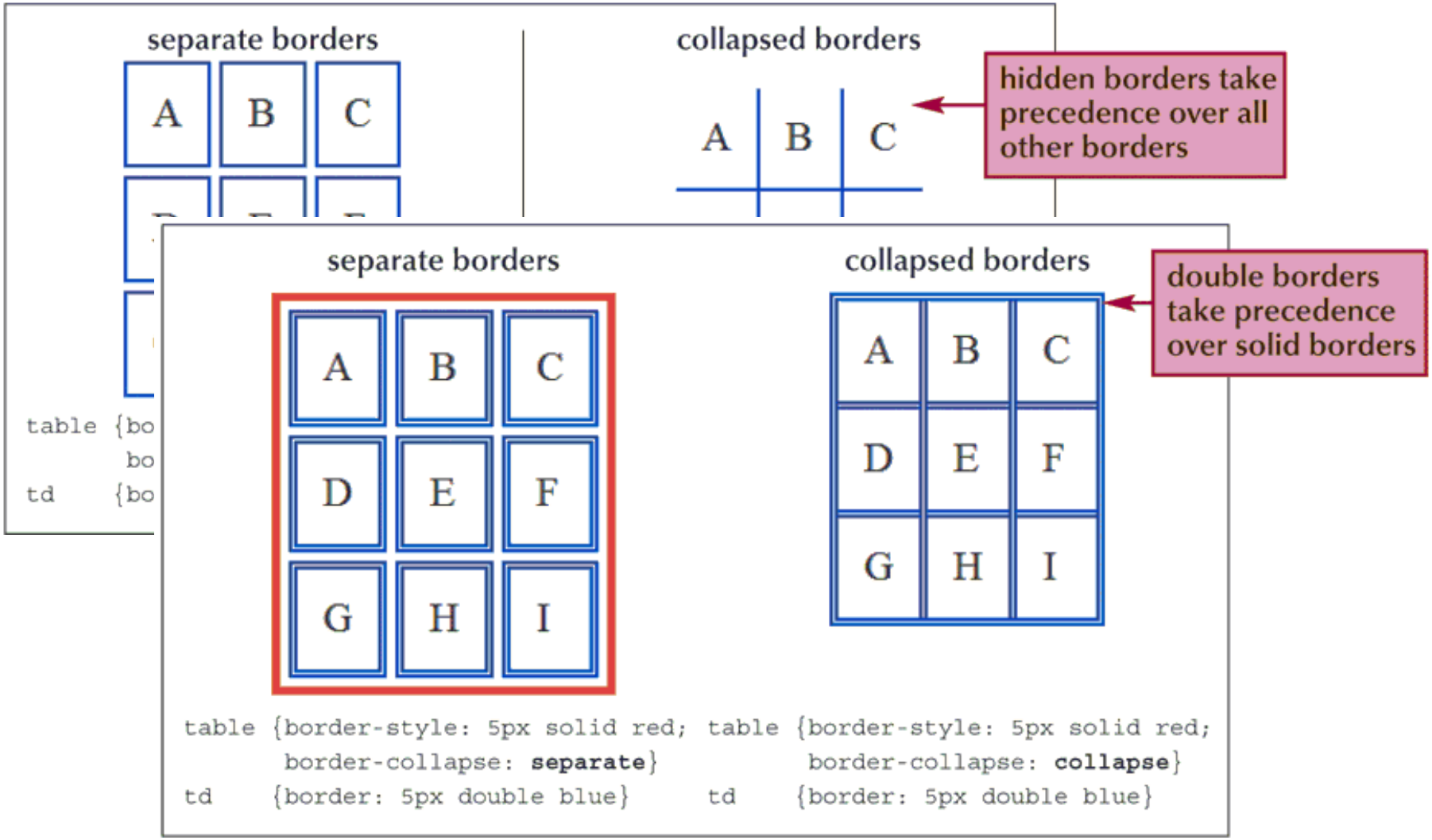
  where *type* is **separate** (the default) to keep all borders around cells and the table itself, separate, or **collapse** to merge all adjacent borders
- If the separate borders are used, set the space between separated borders by applying the table style

  `border-spacing: value`

  where *value* is the space between the borders in any of the CSS units of measure (`cellspacing` in HTML)

Formatting Tables with CSS

Reconciling hidden borders



Formatting Tables with CSS

Textbook Pg 303

```
table.schedule          {border: 10px outset rgb(153,0,153); border-collapse: collapse}

table.schedule th, table.schedule td
                        {border: 1px solid gray}
```

All times listed in central time

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6:00	National News						
6:30	Local News						
7:00	Opera Fest	Radio U	Science Week	The Living World	Word Play	Agri-Week	Folk Fest
7:30					Brain Stew	Bismarck Forum	
8:00	The Classical Music Connection				Old Time Radio	Saturday Nite Jazz	The Indie Connection
8:30					The Inner Mind		
9:00					Open Mike Nite		
9:30							
10:00	World News Feed						

Formatting Tables with CSS

rows, columns and their groups

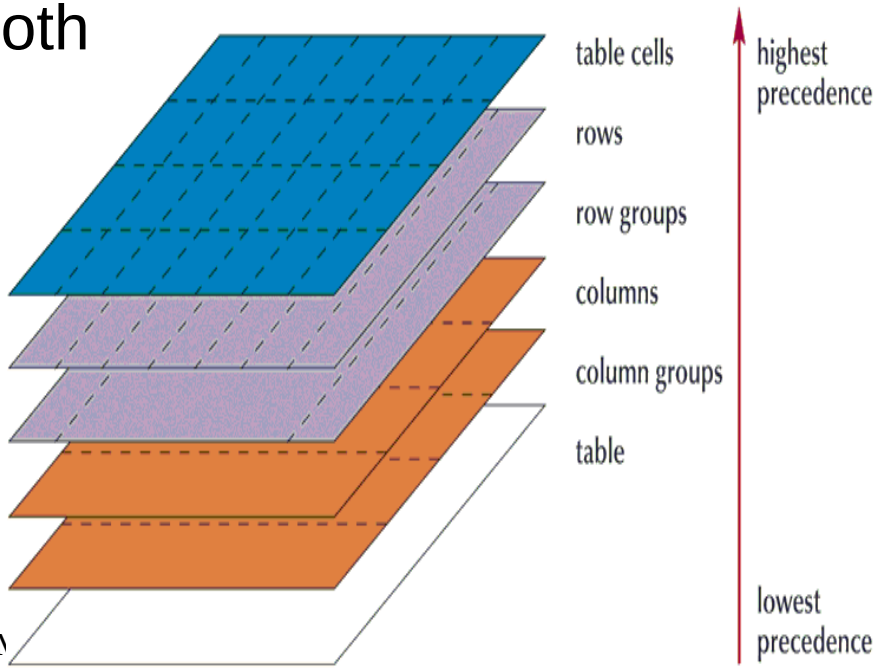
```
table.schedule {font-family: …}
table.schedule thead {color: …}
table.schedule col.firstCol {color: …}
```

First cell in the table belongs to both header row and the first column!

Which style should be applied?

Most general rules are overruled by more specific rules

The most general styles are those applied to the entire table



Formatting Tables with CSS

Textbook Pg 305

```
table.schedule          {border: 10px outset rgb(153,0,153); border-collapse: collapse;
                         font-family: Arial, Helvetica, sans-serif; font-size: 0.7em}

table.schedule th, table.schedule td
                        {border: 1px solid gray; font-family: Arial}

table.schedule thead    {color: white; background-color: rgb(203,50,203)}

table.schedule col.firstCol
                        {background-color: rgb(255,255,192)}
```

table font styles

style applied to thead row group

style applied to first table column

table cells	highest precedence
rows	
row groups	
columns	
column groups	
table	lowest precedence

the Time cell takes the style of the header row rather than the first column

the table caption adopts the font styles of the table

All times listed in central time

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Satur	
6:00	National News						
6:30	Local News						
7:00	Opera Fest	Radio U	Science Week	The Living World	Word Play	Agri-Week	Folk Fest
7:30					Brain Stew	Bismarck Forum	
8:00	The Classical Music Connection				Old Time Radio	Saturday Nite Jazz	The Indie Connection
8:30					The Inner Mind		
9:00					Open Mike Nite		
9:30							
10:00	World News Feed						

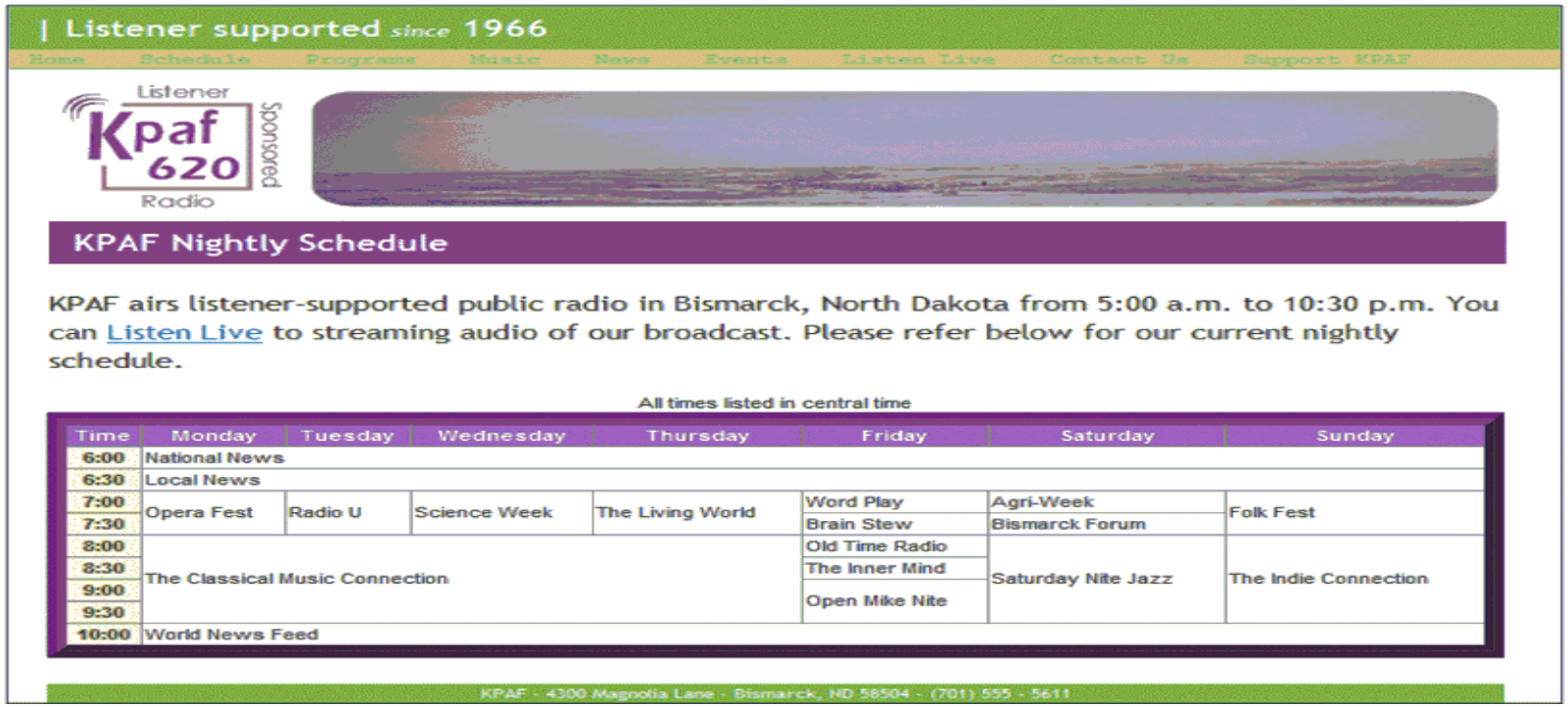
Formatting Tables with CSS

width and height

Textbook
Pg 306-307

- Use width and height styles to enlarge or shrink table

Table width set to 100%




```
table.schedule        {border: 10px outset rgb(153,0,153); border-collapse: collapse;
                       font-family: Arial, Helvetica, sans-serif; font-size: 0.7em;
                       width: 100%}
```

Formatting Tables with CSS

width and height of columns and rows

Textbook Pg 308

widths for the day columns are equal

All times listed in central time

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6:00	National News						
6:30	Local News						
7:00	Opera Fest	Radio U	Science Week	The Living World	Word Play	Agri-Week	Folk Fest
7:30					Brain Stew	Bismarck Forum	
8:00	The Classical Music Connection				Old Time Radio	Saturday Nite Jazz	The Indie Connection
8:30					The Inner Mind		
9:00					Open Mike Nite		
9:30							
10:00	World News Feed						

```
table.schedule col.firstCol
                    {background-color: rgb(255,255,192); width: 7%}

table.schedule col.dayCols
                    {width: 13%}
```

Setting the height of the table rows

```
table.schedule col.dayCols
                    {width: 13%}

table.schedule thead tr {height: 20px}
table.schedule tbody tr {height: 30px}
```

Formatting Tables with CSS

Align data cells

Textbook Pg 309

table header row is 20 pixels high

table body rows are 30 pixels high

All times listed in central time

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6:00	National News						
6:30	Local News						
7:00	Opera Fest	Radio U	Science Week	The Living World	Word Play	Agri-Week	Folk Fest
7:30					Brain Stew	Bismarck Forum	
8:00	The Classical Music Connection				Old Time Radio	Saturday Nite Jazz	The Indie Connection
8:30					The Inner Mind		
9:00					Open Mike Nite		
9:30							
10:00	World News Feed						

cell text is aligned with the top of the cell with 5 pixels of padding

```
table.schedule thead tr {height: 20px}
table.schedule tbody tr {height: 30px}

table.schedule tbody td {vertical-align: top; padding: 5px}
```

Formatting Tables with CSS

caption style

Textbook Pg 310

To position a table caption, apply the style

`caption-side: position` where *position* is top or bottom

All times listed in central time

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6:00	National News						
6:30	Local News						
7:00	Opera Fest	Radio U	Science Week	The Living World	Word Play	Agri-Week	Folk Fest
7:30					Brain Stew	Bismarck Forum	
8:00	The Classical Music Connection				Old Time Radio	Saturday Nite Jazz	The Indie Connection
8:30					The Inner Mind		
9:00					Open Mike Nite		
9:30							
10:00	World News Feed						

caption is aligned with the top-right corner of the table

```
table.schedule tbody td {vertical-align: top; padding: 5px}
table.schedule caption  {caption-side: top; text-align: right}
```

Applying Table Styles to Other Page Elements

Display Style	Equivalent HTML Element
`display: table`	table (treated as a block-level element)
`display: table-inline`	table (treated as an inline element)
`display: table-row`	tr
`display: table-row-group`	tbody
`display: table-header-group`	thead
`display: table-footer-group`	tfoot
`display: table-column`	col
`display: table-column-group`	colgroup
`display: table-cell`	td or th
`display: table-caption`	caption

Applying Table Styles to Other Page Elements

```
<dl>
   <div>
      <dt>bandwidth</dt>
      <dd>A measure of data transfer speed over
          a network</dd>
   </div>
   <div>
      <dt>HTTP</dt>
      <dd>The protocol used to communicate with
          Web servers</dd>
   </div>
</dl>
```

definition list code

```
dl      {display: table; border-collapse: collapse;
         width: 300px}

dl div {display: table-row}

dt, dd {display: table-cell; border: 1px solid black;
         vertical-align: top; padding: 5px}
```

table styles

bandwidth	A measure of data transfer speed over a network
HTTP	The protocol used to communicate with Web servers

definition list displayed as table

Session 5.3
Using Tables for Page Layout

| Listener supported *since* 1966

Home Schedule Programs Music News Events Listen Live Contact Us Support KPAF

Listener Kpaf 620 Radio Sponsored

KPAF Nightly Schedule

KPAF airs listener-supported public radio in Bismarck, North Dakota from 5:00 a.m. to 10:30 p.m. You can Listen Live to streaming audio of our broadcast. Please refer below for our current nightly schedule.

All times listed in central time

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6:00	National News						
6:30	Local News						
7:00	Opera Fest	Radio U	Science Week	The Living World	Word Play	Agri-Week	Folk Fest
7:30					Brain Stew	Bismarck Forum	
8:00	The Classical Music Connection				Old Time Radio	Saturday Nite Jazz	The Indie Connection
8:30					The Inner Mind		
9:00					Open Mike Nite		
9:30							
10:00	World News Feed						

KPAF · 4300 Magnolia Lane · Bismarck, ND 58504 · (701) 555 - 5611

Coming up on KPAF

April 11

April 12

April 13

April 14

Using Tables for Page Layout

Textbook
Pg 313-314

Inserting the right_col div element

```
        <address>
           KPAF &#183;
           4300 Magnolia Lane &#183;
           Bismarck, ND 58504 &#183;
           (701) 555 - 5611
        </address>

    </div>

    <div id="right_col">
    </div>

</body>
```

Rectangle with rounded box?

Adding styles to create a two-column layout

```
body                    {margin: 0px}
#heading                {color: white; background-color: rgb(215, 205, 151);
                         border-bottom: 1px solid rgb(105, 177, 60)}
#page_content           {width: 730px; position: absolute; top: 55px; left: 20px}
#right_col              {width: 200px; position: absolute; top: 55px; left: 770px}
```

Using Tables for Page Layout

Jigsaw table

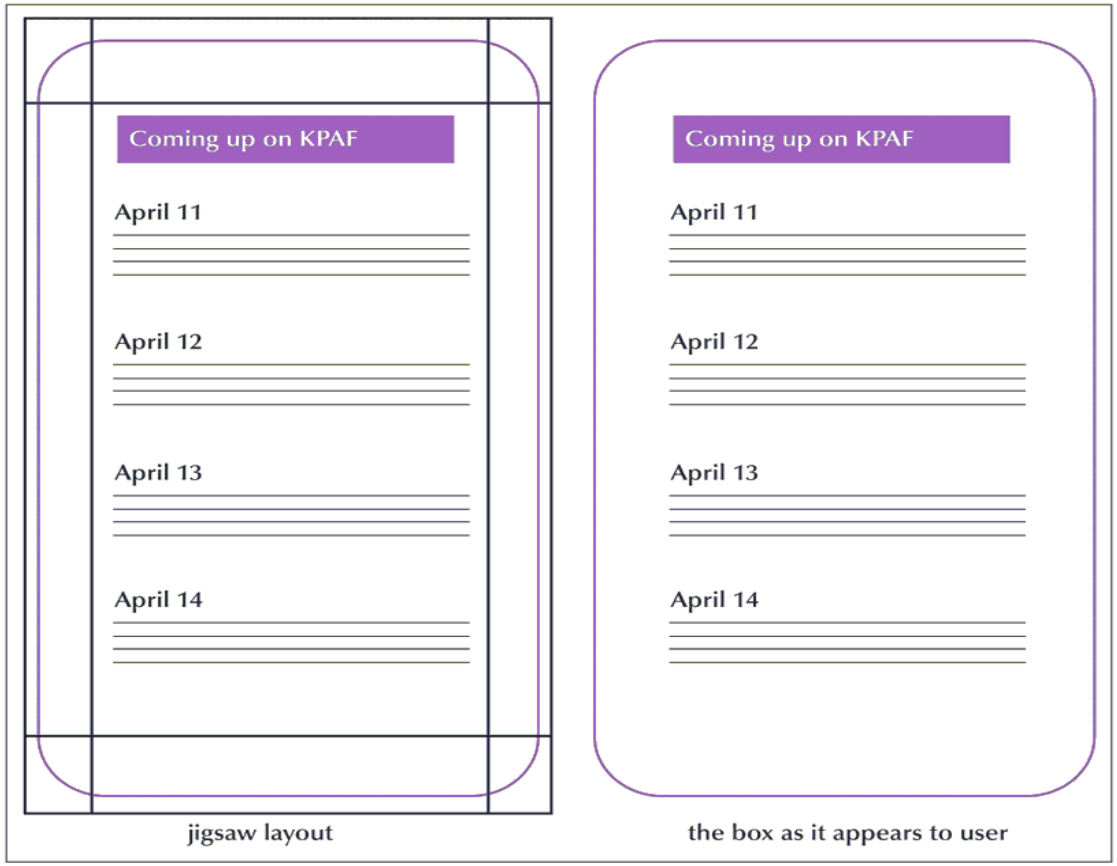
- The **jigsaw layout** involves breaking up the page content into separate table cells that are then joined together like pieces in a jigsaw puzzle

table grid

Using Tables for Page Layout Jigsaw table

Textbook
Pg 317-318

Creating a box with rounded corners



jigsaw layout

the box as it appears to user

```
table.roundedBox    {margin: 5px; border-collapse: collapse}
table.roundedBox td {padding: 0px}
```

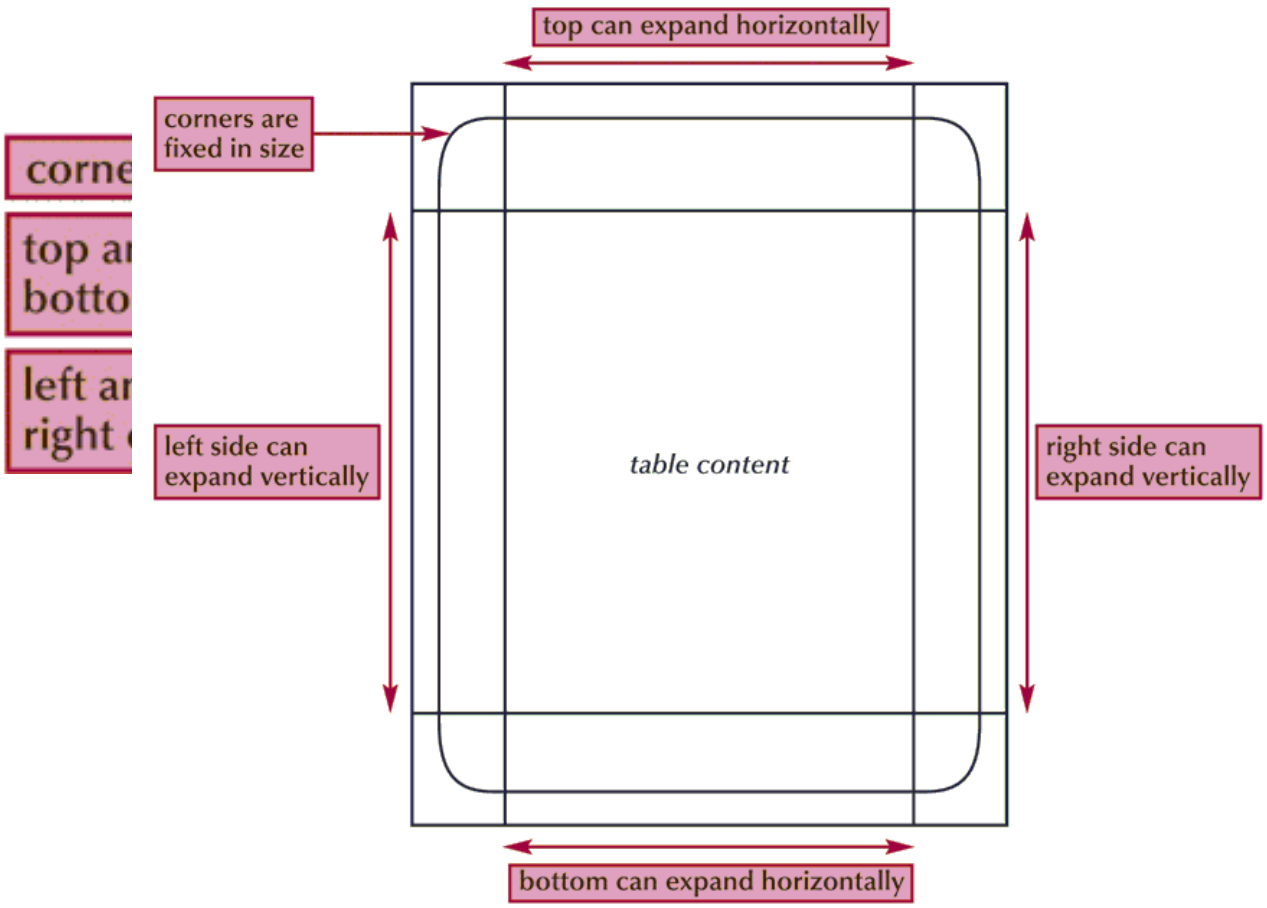
```
<div id="right_col">
   <table class="roundedBox">
      <tr>
         <td></td>
         <td></td>
         <td></td>
      </tr>
      <tr>
         <td></td>
         <td></td>
         <td></td>
      </tr>
      <tr>
         <td></td>
         <td></td>
         <td></td>
      </tr>
   </table>
</div>
```

```
<div id="right_col">
   <table class="roundedBox">
      <tr>
         <td class="topLeft"></td>
         <td class="top"></td>
         <td class="topRight"></td>
      </tr>
      <tr>
         <td class="left"></td>
         <td class="boxContent"></td>
         <td class="right"></td>
      </tr>
      <tr>
         <td class="bottomLeft"></td>
         <td class="bottom"></td>
         <td class="bottomRight"></td>
      </tr>
   </table>
</div>
```

Using Tables for Page Layout Jigsaw table

Textbook Pg 320

Setting cell widths and heights

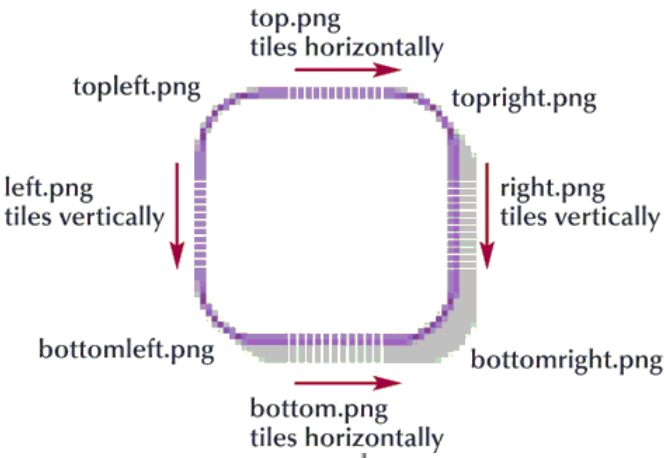



```
pse: collapse}

height: 16px}
height: 16px}
height: 16px}
height: 16px}

height: 16px}
height: 16px}

height: auto}
height: auto}
```

Using Tables for Page Layout Addingtable rounded border

Textbook Pg 321

The layout of the eight border images



Setting the background images for the eight corners

```
   {margin: 5px; border-collapse: collapse}
td {padding: 0px}

td.topLeft      {width: 16px; height: 16px}
td.topRight     {width: 16px; height: 16px}
td.bottomLeft   {width: 16px; height: 16px}
td.bottomRight  {width: 16px; height: 16px}

td.top          {width: auto; height: 16px}
td.bottom       {width: auto; height: 16px}

table.roundedBox td.left        {width: 16px; height: auto}
table.roundedBox td.right       {width: 16px; height: auto}

.topLeft     {background: url(topleft.png) no-repeat top left}
.topRight    {background: url(topright.png) no-repeat top right}
.bottomLeft  {background: url(bottomleft.png) no-repeat bottom left}
.bottomRight {background: url(bottomright.png) no-repeat bottom right}

.top         {background: url(top.png) repeat-x top}
.bottom      {background: url(bottom.png) repeat-x bottom}

.left        {background: url(left.png) repeat-y left}
.right       {background: url(right.png) repeat-y right}
```

corners

top and bottom sides

left and right sides

Coming Up on KPAF

Textbook Pg 322

Inserting the sample text

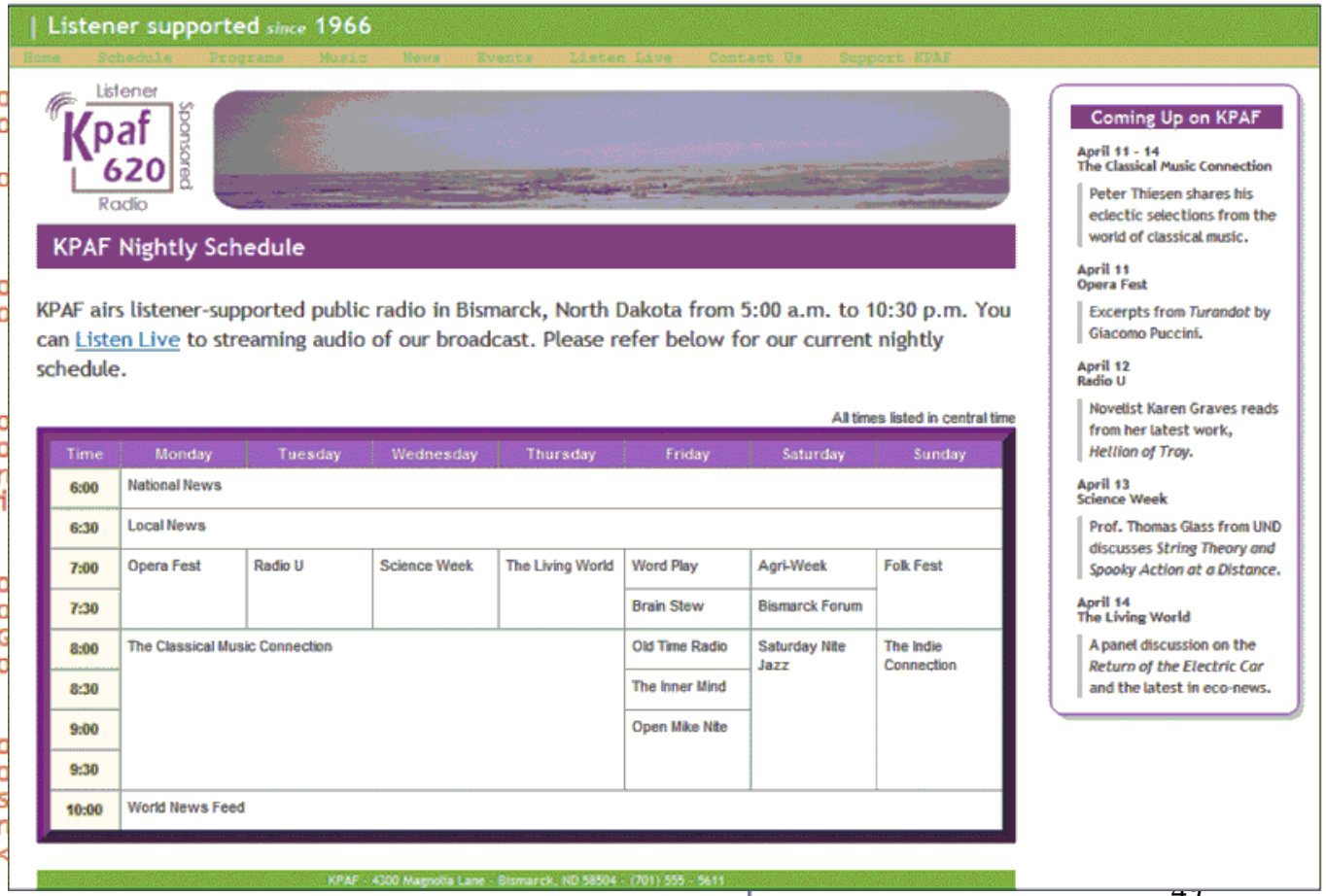
```
        <address>
           KPAF &#183;
           4300 Magnolia Lane &#183;
           Bismarck, ND 58504 &#183;
           (701) 555 - 5611
        </address>

    </div>

        <div id="right_col">
           <table class="roundedBox">
              <tr>
                 <td class="topLeft"></td>
                 <td class="top"></td>
                 <td class="topRight"></td>
              </tr>
              <tr>
                 <td class="left"></td>
                 <td class="boxContent">Coming Up on KPAF</td>
                 <td class="right"></td>
              </tr>
              <tr>
                 <td class="bottomLeft"></td>
                 <td class="bottom"></td>
                 <td class="bottomRight"></td>
              </tr>
           </table>
        </div>

</body>
```

Insert more content

Textbook Pg 323

```
<td class="boxContent">
<h1 class="newshows">Co

<ul class="newshows">
   <li>
      <h2 class="newsho
      <h3 class="newsho
      <p>Peter Thiesen
         selections fro
         music.</p>
   </li>
   <li>
      <h2 class="newsho
      <h3 class="newsho
      <p>Excerpts from
   </li>
   <li>
      <h2 class="newsho
      <h3 class="newsho
      <p>Novelist Karer
         work, <i>Helli
   </li>
   <li>
      <h2 class="newsho
      <h3 class="newsho
      <p>Prof. Thomas G
         <i>String Theo
   </li>
   <li>
      <h2 class="newsho
      <h3 class="newsho
      <p>A panel discus
         the <i>Return
         in eco-news.<
   </li>
</ul>
</td>
```

The upcoming programs sidebar



Exploring the Controversy over Table Layouts

- Table layouts are not in the spirit of HTML
  - Use div containers and CSS
- Table layouts are difficult to revise
- Tables take longer to render
- Tables can be code-heavy
- Tables can be inaccessible to users with disabilities

```
<table>
   <tr>
      <th>Time</th>
      <th>Thursday</th>
      <th>Friday</th>
   </tr>
   <tr>
      <th>7:00</th>
      <th>colspan="2">The Living World</th>
      <th>World Play</th>
   </tr>
   <tr>
        <th>7:30</th>
        <th>Brain Stew</th>
   </tr>
   </table>
```

HTML table code

Time	Thursday	Friday
7:00	The Living World	Word Play
7:30		Brain Stew

table displayed visually

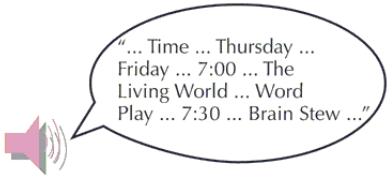
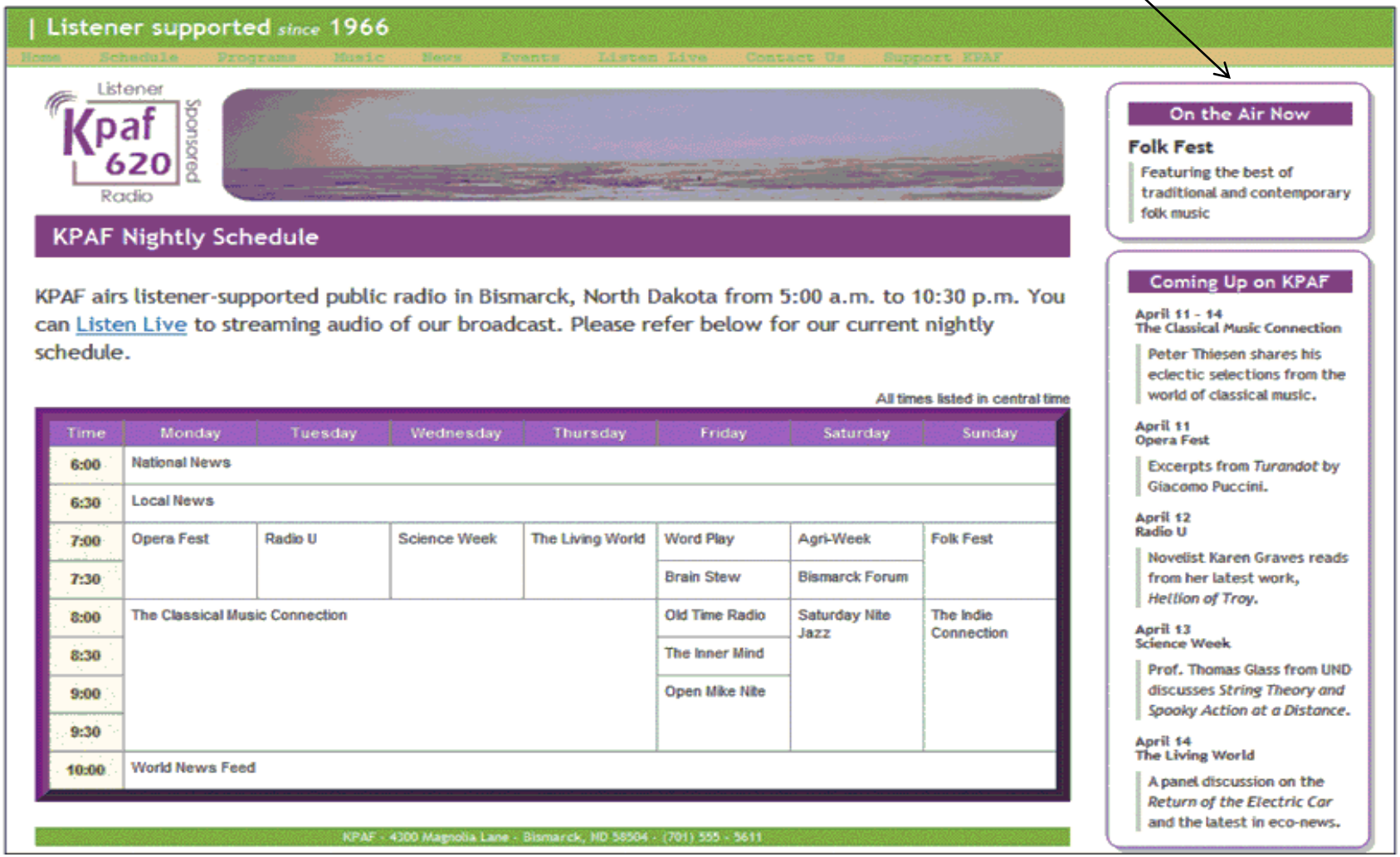


table read by an aural browser doesn't clearly convey the table contents

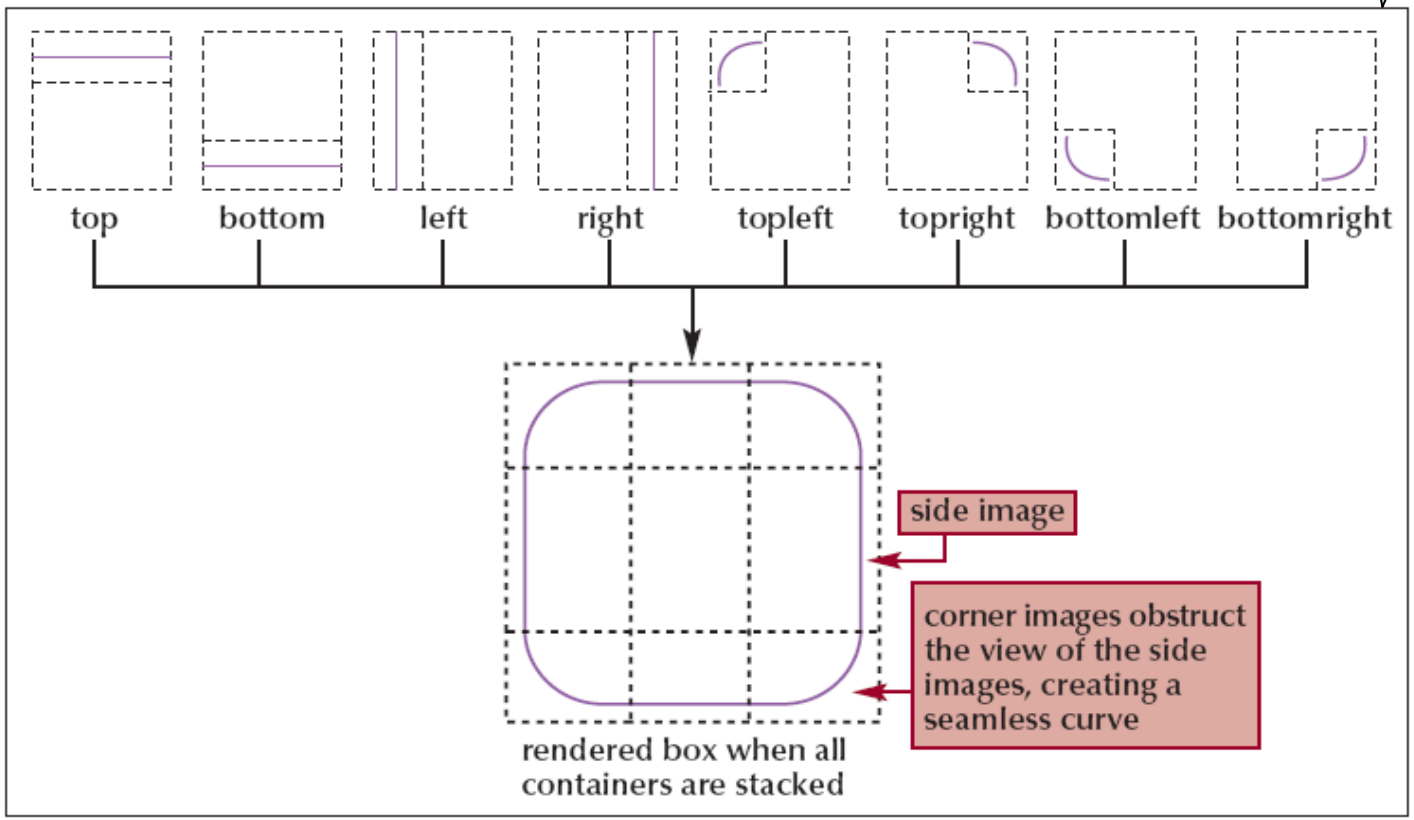
Add another round box



Creating a Rounded Box Using div Containers

CSS ?

Creating a rounded border using nested div elements



Creating a Rounded Box Using div Containers

Textbook
Pg 327-8-9

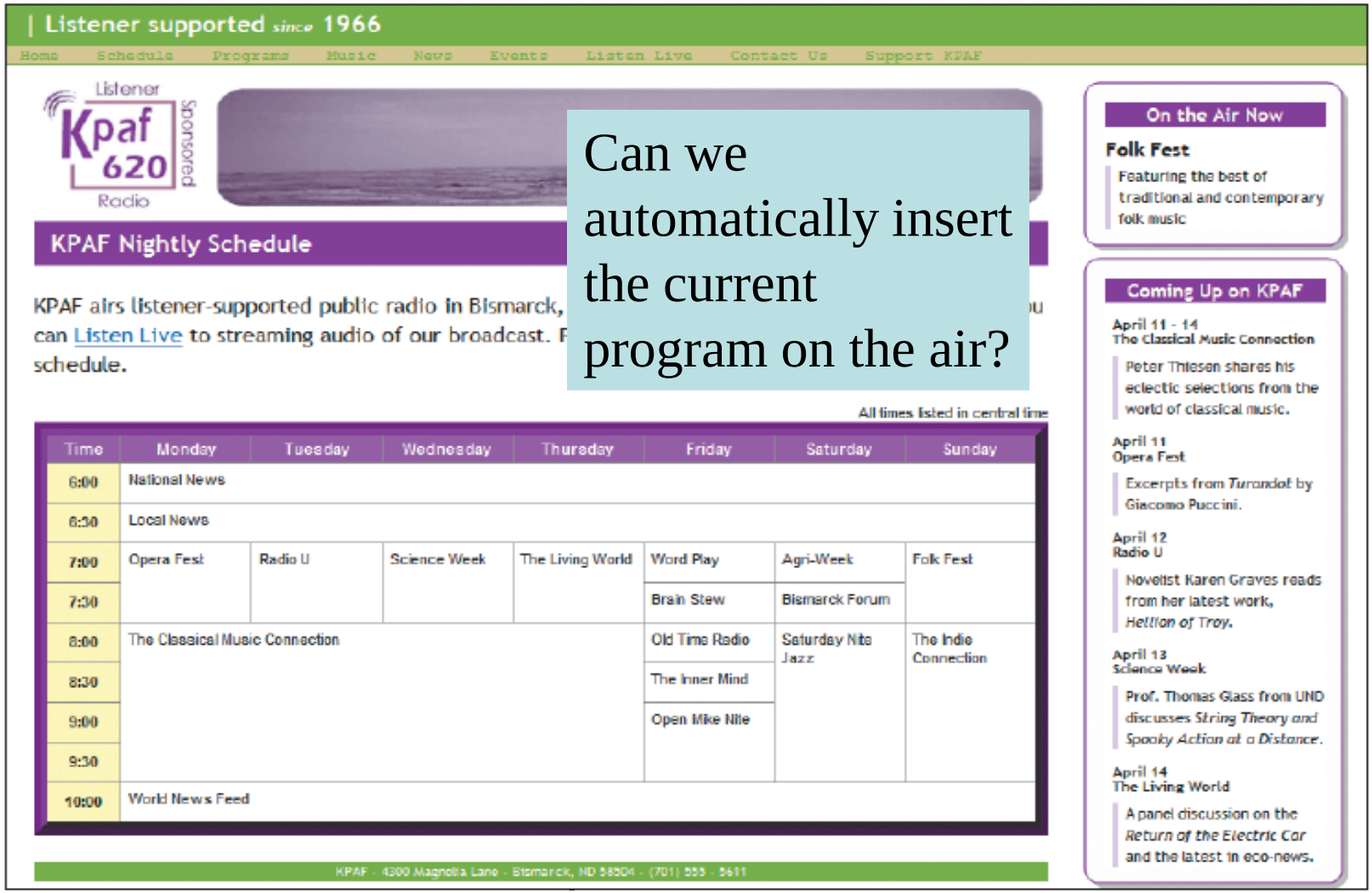
```
<div id="right_col">

    <div class="roundedBox">
        <div class="top"><div class="bottom">
        <div class="left"><div class="right">
        <div class
        <div class

        <div class
        </div>

        </
        </
    </div>

    <table
        <tr

        </1
```

```
<div class="roundedBox">
    <div class="top"><div class="bottom">
    <div class="left"><div class="right">
    <div class="topLeft"><div class="topRight">
    <div class="bottomLeft"><div class="bottomRight">

    <div class="boxContent">
        <h1 class="newshows">On the Air Now</h1>
        <h2 class="newshows">Folk Fest</h2>
        <p  class="newshows">Featuring the best of traditional
            and contemporary folk music</p>
    </div>

    </div></div></div></div>
    </div></div></div></div>
</div>
```

```
.topLeft
.topRigh
.bottomL
.bottomR

.top
.bottom

.left
.right
```

```
div.roundedBox {margin: 5px; position: relative}
div.boxContent {padding: 16px}
```

Creating a Rounded Box Using div Containers



Can we automatically insert the current program on the air?

Summary

- Tables
  - Formatting using HTML
  - CSS styling
- Table Layouts
- Rounded boxes
  - Table
  - Div